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Claim 1 (Cancelled).

Claims 2 and 3 (Previously Cancelled).

Claim 4 (Four Times Amended): A ~~recombinant~~ heterologous nucleic acid molecule ~~encoding at least a functional part of a eukaryotic internal ribosomal entry site, which said eukaryotic internal ribosomal entry site, in a mitotic PITSLRE protein kinase gene, comprises~~ comprising a recombinant nucleic acid sequence selected from the group consisting of SEQ ID NO:1, or a functional part of SEQ ID NO:1 and wherein said eukaryotic internal ribosomal entry site initiates mRNA translation in a eukaryotic cell SEQ ID NO:7, and combinations thereof.

Claims 5 through 7 (Cancelled).

Claims 8 through 10 (Previously Cancelled).

Claim 11 (Five Times Amended): A chimeric gene comprising:

- (a) said recombinant nucleotide sequence of claim 4 37, and
- (b) one or more control sequences operably linked to said recombinant nucleotide sequence.

Claim 12 (Five Times Amended): A vector comprising the recombinant nucleotide sequence of claim 4 37.

Claim 13 (Original): The vector of claim 12 wherein said vector is an expression vector, said vector further comprising a promoter.

Claim 14 (Five Times Amended): A eukaryotic host cell comprising the recombinant nucleotide sequence of claim 4 37.

Claim 15 (Original): An expression system comprising the eukaryotic host cell of claim

14.

Claims 16 through 22 (Previously Cancelled).

Claim 23 (Original): A vector comprising the chimeric gene of claim 11.

Claim 24 (Original): A eukaryotic host cell comprising the chimeric gene of claim 11.

(X) Claim 25 (Twice Amended): A ~~recombinant~~ heterologous nucleic acid molecule consisting essentially of a recombinant nucleic acid sequence selected from the group consisting ~~essentially~~ of SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6 and combinations thereof, said recombinant nucleic acid ~~molecule~~ sequence initiating the translation of mRNA in a eukaryotic cell.

Claim 26 (Previously Cancelled).

Claim 27 (Twice Amended): A chimeric gene comprising:

- a) the recombinant nucleic acid ~~molecule~~ sequence of claim 25, and
- b) one or more control sequences operably linked to said recombinant nucleic acid ~~molecule~~ sequence.

Claim 28 (Twice Amended): A vector comprising the recombinant nucleic acid ~~molecule~~ sequence of claim 25.

Claim 29 (Original): The vector of claim 28 wherein said vector is an expression vector, said vector further comprising a promoter.

Claim 30 (Amended): A eukaryotic host cell comprising the recombinant nucleic acid ~~molecule~~ sequence of claim 25.

Claim 31 (Original): An expression system comprising the eukaryotic host cell of claim 30.

Claim 32 (Original): A vector comprising the chimeric gene of claim 27.

Claim 33 (Original): The vector of claim 32, wherein said vector is an expression vector, said vector further comprising a promoter.

Claim 34 (Original): A eukaryotic host cell comprising the chimeric gene of claim 27.

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Claim 35 (Original): An expression system comprising the eukaryotic host cell of claim 34.

Claim 36 (Original): An expression system comprising the eukaryotic host cell of claim 24.

Claim 37 (New): A recombinant nucleotide sequence comprising SEQ ID NO:1, 4-6 or 7 comprised within a heterologous nucleic acid.

Claim 38 (New): The recombinant nucleotide sequence of claim 37, wherein said recombinant nucleotide sequence enables a G2/M cell cycle-dependent initiation of translation of mRNA.

Claim 39 (New): The recombinant nucleotide sequence of claim 38, wherein said recombinant nucleotide sequence is an internal ribosomal entry site sequence which initiates mRNA translation in a eukaryotic cell.

Claim 40 (New): The heterologous nucleic acid molecule of claim 4, wherein said recombinant nucleic acid sequence is a eukaryotic internal ribosomal entry site which initiates mRNA translation in a eukaryotic cell.